



A Strategic Framework for Developing your Data Centre Network

How to plan for your future network.

Introduction

Your business of tomorrow will need a Data Centre Network (DCN) that supports and enables it. The DCN will need to be efficient, stable, scalable, and secure, enabling your organisation to focus on the core activities that make it unique.

There will of course, be some challenges in moving from the current design to the new infrastructure your organisation will need in the future. Not least because current DCN performance and stability will need to be maintained to support corporate objectives while the groundwork for your improved and future-ready solution is prepared and implemented. Widespread people and skills shortages in IT make it challenging when you're trying to drive change.

At BestPath, we want organisations to enjoy the benefits of the latest networking technologies. With extensive expertise in developing bespoke networking solutions for our clients, we've put together this guide on some of the main areas to focus on, and questions to ask, when creating a proactive strategic framework to develop your DCN.

There are links to additional resources throughout. If this guide raises any practical questions or you'd like some additional expert advice, get in touch.

Hear us discuss key networking topics in our podcast!



**Switching
Up** with

Jimbo & Nick

Contents

Strategic Framework Planning Steps	4
STEP 1: Defining objectives and scope	5
STEP 2: Assessing current state	6
STEP 3: Identifying future requirements	7
STEP 4: Reviewing industry and technology trends	8
STEP 5: Performing gap analysis	9
STEP 6: Exploring strategic initiatives	10
STEP 7: Preparing risk management measures	11
STEP 8: Planning implementation and execution	12
STEP 9: Conducting evaluations and reviewing	13
Getting started with expert support	14





STEP 1:

Defining objectives and scope

As your DCN forms part of the broader IT infrastructure that supports your organisation's processes, it's clear that your DCN strategy must align with overall business goals and objectives. For this guide, consider your organisation's goals for the next five years, but this can be adapted to your organisation's unique circumstances.

Looking at the corporate goals that have been set for the next few years will enable you to define the necessary scope of your project.

1. Information gathering

Identify objectives:

- List and prioritise your organisation's goals/objectives for the next five years (or duration of latest strategic plan)
- List and prioritise your Data Centre Network strategy objectives
- Identify dependencies with broader infrastructure portfolio e.g. Cloud, compute, storage
- List any network infrastructure service level agreements

Review

Are your DCN objectives aligned with the organisation's objectives? If not, how will you align these?



2. Information gathering

Where will your organisation be located?

- List your organisation's current workplace locations
- List sites where you expect the organisation to be physically located in five years' time

Action

Define the geographical locations for your Data Centre Network



3. Information gathering

Consider how your network may grow:

- What is your current network capacity?
- How do you expect your capacity requirements to grow over the next five years?

Review

Define proposed scope of future DCN



STEP 2:

Assessing current state

A detailed review of your current network infrastructure will help you understand what's performing well and the areas for improvement. It will also give you an idea of which parts of the infrastructure are unlikely to be included in your new solution. Collect and collate information, then analyse and assess the data to ensure you have answers for the review questions below.

1. Information gathering

Evaluate existing Data Centre Network infrastructure:

- Inventory of hardware, software versions, and network architecture
- Support coverage of existing infrastructure
- When/why were they purchased?

Review

- **Is the existing network design still fit for purpose?**
- **What feedback is provided by other infrastructure teams?**



2. Information gathering

Collect and analyse network metrics:

- Performance
- Capacity
- Scalability

Action

Do the results meet existing SLAs or business commitments? What would better statistics look like?



3. Information gathering

List the security and compliance measures that need to be enforced:

- Security measures
- Compliance measures

Review

- **Are these still required?**
- **Any feedback/thoughts on their implementation**



4. Information gathering

Perform a SWOT analysis of your current DCN infrastructure, i.e. what do you see as the network's:

- Strengths
- Weaknesses
- Opportunities
- Threat

Review

Prioritise: Rank items in each category to understand priorities for strategic improvements.



5. Information gathering

Document the existing network processes. Evaluate each process and assess whether they can be improved



STEP 3:

Identifying future requirements

Having fully assessed your existing network and its capabilities, it's time to consider where your Data Centre Networking capabilities need to be over the next five years. How are the network requirements likely to change?

1. Information gathering

What are the overall strategic objectives of your organisation over the next five years?

Review

What changes to IT strategy and requirements are you aware of?

What are your initial thoughts about future IT requirements?



2. Information gathering

Estimate what the changes to IT requirements might be, based on the organisational strategy:

- Increased capacity?
- Improved performance?
- Enhanced security?
- Use of emerging technologies?
- Network automation?

Action

Is additional clarity required from other departments to firm up these estimates?



3. Information gathering

How important do you consider the following will be over the next five years?

- Flexibility
- Agility
- Scalability

Review

is your organisation likely to grow over the next five years, either organically or via mergers/acquisitions?



4. Information gathering

How do you anticipate usage and user profiles will change over the next five years?

- How will users access the infrastructure? e.g. which client platform
- Where will users access the infrastructure from? e.g. location
- Where will the business applications be hosted?
- Are any changes to security risks envisaged?

Review

How will hybrid working practices impact your future network infrastructure requirements?



STEP 4:

Reviewing industry and technology trends

Keeping up-to-speed with changes, including regulatory compliance and best practice guidance, is essential for ensuring your infrastructure performs as it should and does not expose unnecessary risks that could compromise your business or your customers' privacy.

1. Information gathering

Research and analyse:

- Latest industry trends and best practices for Data Centre Networks

Review

Do you already have plans in place to introduce any of the trending topics or align with these best practices?



2. Information gathering

Put a plan in place to keep informed about emerging technologies:

- Check which are the most reliable sources of information
- Schedule regular reviews, to ensure important news isn't overlooked

Action

- **Are they relevant for your industry?**
- **What could their potential impact be on your network?**



3. Information gathering

Check for the latest regulatory and compliance requirements:

- What are they?
- When is the deadline for compliance?

Review

- **Are they relevant for your industry?**
- **What could their potential impact be on your network?**



STEP 5:

Perform gap analysis

In an ideal world, all gaps between your existing DCN and desired future state should be addressed and fixed. But typically there will be resource limitations on costs, time constraints, and people to action the changes, so priorities must be established.

1. Comparison

Gap analysis:

- Compare your current state (STEP 2) and future requirements (STEP 3) answers, to identify any gaps between where you are with your current DCN, and what you would like it to look like in the future



2. Prioritisation

Score each identified gap according to:

- Expected impact on business objectives
- Feasibility of implementation

Prioritise the identified gaps, according to these impact and feasibility scores



STEP 6: Exploring strategic initiatives

Consider your options for addressing gaps identified, and put plans in place to action your chosen strategic initiatives.

1. Strategy

Develop a set of strategic initiatives to address the identified gaps (STEP 5) in order of priority, aligned with the organisation's goals (STEP 3)



2. Projects

Within the strategic initiatives, define key projects/initiatives, such as:

- Network hardware and software upgrades
- Security enhancements
- Cloud integration
- Automation implementation



3. Responsibility

Assign responsible stakeholders for each project/initiative



4. What success looks like

For each project initiative, with the responsible stakeholders, establish success parameters:

- Timelines
- Budgets
- Performance indicators



STEP 7:

Prepare risk management measures

Next, the risks associated with strategic initiatives must be established and addressed, so your infrastructure is protected and secure.

- 1. For each of your strategic initiatives (STEP 6), identify potential risks/challenges**
- 2. To minimise disruption and ensure business continuity, for each potential risk, develop:**
 - Risk mitigation strategies
 - Contingency plans
- 3. Consider security risks such as cyber threats and data breaches, and implement robust measures to protect your DCN**

STEP 8:

Planning implementation and execution

With all the information compiled in the previous steps, you're now ready to construct your future-ready Data Centre Network implementation plan. Breaking the plan down into manageable steps will ensure you can keep on top of the project and modify parts of the plan that are affected by changes in circumstances or that are not meeting defined performance criteria.

1. Define actionable steps

Break down your strategic initiatives into actionable steps.

This will form the basis of your detailed implementation plan.



2. Allocate resources

For each step, allocate necessary resources, such as:

- Human resources
- Budget
- Infrastructure



3. Monitor and evaluate

For each initiative, monitor progress, with regular evaluation against the parameters defined in STEP 6.



4. Adjust plan

Adjust the plan to take account of:

- Changing circumstances
- Technology advancements
- Business priorities



If the parameters defined in STEP 6 are not being met, reasons will need to be identified, and the plan adjusted if necessary.



STEP 9: Conduct evaluations and review

Evaluations will confirm if your strategic initiatives are producing the performance expected, as well as giving the opportunity to make adjustments to strategic initiatives based on changing circumstances.

1. Plan effectiveness

Regular evaluations of the effectiveness of the strategic plan (STEP 8) should be used to assess its impact on the Data Centre Network.



2. Plan review

Review of the plan can be:

- Annual (or on an agreed regular basis)
- As required, based on feedback from stakeholders

The strategy should be adjusted when requirements evolve, due to:

- Changing business needs
- Technological advancements





Getting started with expert support

Getting your future-ready Data Centre Network planned and implemented involves: (a) asking a lot of questions, and (b) knowing what to do with the answers, to identify, optimise, and operate the best network infrastructure for your organisation.

Whatever the size of your internal IT team, getting guidance and support from BestPath, an experienced networking partner with specific expertise in datacentre infrastructure and automation, will make a difference to the efficiency and security of your new infrastructure set-up, and will help ensure all aspects of the planning and transition run smoothly.

At BestPath, we'll take you through the whole process, from start to finish and beyond. We keep up-to-speed with the latest networking trends and technologies so you can focus on managing the IT challenges specific to your business. Because we've been working in this area for so long, we know how to design and implement and automate networks based on known requirements and often unspoken needs. We'll also advise on how to keep your current DCN functioning to the best of its ability while your new solution evolves.



BESTPATH

We're BestPath. The unsung heroes, working quietly and competently behind the scenes to inspire and empower our clients. Combining curiosity with innovation we deliver agile, secure and trusted network infrastructures that enable businesses to deliver exceptional services and outstanding customer experiences. Let's chat about how we can do just that, for you.



info@bestpath.io



+44 (0)203 879 4826